



Patient Waiting Time: It Can Be Reduced

Problem Solving

In today's complex practice environment, more and more physicians are turning to marketing their practices in an effort to increase their patient base. Essentially enhancing and promoting medical practices consists of a multitude of factors including, but not limited to office decor, physician/patient relationship, advertising, and patient waiting time. The researcher has limited this study to a persistent problem, patient waiting time.^{1-6,8} When waiting time is reduced, both physicians and patients benefit: patients will not have to spend long periods of time waiting to see the physician; and, physicians can increase their patient base through referrals from satisfied patients who will tell friends and acquaintances about their positive doctor's office experience. Most new patients are referred through word-of-mouth from satisfied patients.⁶

Procedures Utilized

In researching patient waiting time and solutions to decrease waiting time, the researcher studied two physician offices each consisting of two general practitioners. In each office there was a subject group, referred to as Dr. S₁ and Dr. S₂, and a control group, referred to as Dr. C₁ and Dr. C₂.

Patient waiting time was measured twice in each office: one initial time measurement and a final measurement at the end of the study to see if any changes had occurred. After the first time measurement, three variables were introduced in an attempt to reduce waiting time. These were: scheduling at ten-minute intervals, use of the telephone,⁷ and requesting the patient call in advance of the regularly scheduled appointment to see if the physician was on time.

Scheduling at ten-minute intervals³ not only keeps the patient more on schedule but the doctor as well. Psychologically, people tend to be more on time when an appointment is made at 8:40 a.m. as compared to 8:30 a.m. Appointments were made at ten-minute intervals instead of the usual fifteen-minute interval with the receptionist adjusting the time accordingly if a longer period was needed.

Use of the telephone (telemedicine⁷) can be expanded considerably, resulting in increased time for a physician. The receptionist scheduled two ten-minute periods per day, one in the morning and one in the late afternoon, to allow the physician to make any calls that were necessary. Emergency calls were cause for interruption. However, all other telephone calls, such as to other physicians or follow-up calls to patients, were placed during two time periods. The receptionist, or nurse, was requested to screen and handle telephone calls whenever possible.

The last variable implemented requested that patients call one to two hours in advance of their appointment (or the night before for early morning appointments) to avoid any unnecessary waiting. This request was printed on the reverse side of the appointment card. Other variations on this theme have been to have the receptionist call the patient in advance.⁵ However, after discussing this with office staff, it was felt that their time could be better utilized elsewhere if the burden to call was placed on the patient. When the patient called and the physician was delayed, the receptionist could adjust the appointment time or reschedule for another day.

Results of Study

After completing the two studies for each office, the researcher computed the average waiting time, which was the time from the actual appointment to the actual time the patient saw the physician. The average arrival time was also computed. On the average, patients were 5.1 minutes early for their appointments. The first time study showed all four physicians to have lengthy waiting times with averages ranging from 24.2 minutes to 38.4 minutes. After implementation of the new procedures, the mean times for patients in both experimental groups was reduced significantly (see table 1). There was no significant change in waiting time for the control group patients in both offices.

Table 1
Comparison of Subject and Control Group
Reductions In Patient Waiting Times Following
Implementation of Procedures
(Random Sample)

| Group | N | Pretest | | Post Test | | | Mean Difference |
|--------------------|----|---------|----|-----------|------|----|-------------------|
| | | X | SD | N | X | SD | |
| Dr. S ₁ | 19 | 38.4 | 15 | 17 | 17.9 | 18 | 20.5 ^a |
| Dr. S ₂ | 16 | 24.2 | 12 | 19 | 16.3 | 14 | 7.9 ^a |
| Dr. C ₁ | 20 | 29.2 | 21 | 16 | 30.1 | 25 | 0.9 |
| Dr. C ₂ | 14 | 33.7 | 17 | 10 | 32.5 | 12 | 1.2 |

N = Number of Patients

X = Mean Waiting Time

SD = Standard Deviation

a = Significant at the .05 level using group t-test

Conclusions

Patient waiting time can be reduced. Dr. S₁'s final waiting times, which showed a mean reduction in 20.4 minutes from the first study, were influenced by the use of telemedicine and patients calling in advance (four patients called in advance during the second time study). The office manager and staff felt that scheduling

at fifteen-minute intervals was more appropriate for their patients and did not use the ten-minute scheduling intervals. All three variables were utilized in Dr. S₂'s office and the final waiting time was reduced by a mean 7.9 minutes.

Recommendations

After review of the results, the researcher felt there was a misconception about what the physician perceived as the amount of time needed to treat a patient, the time the receptionist perceived as needed for the treatment, and the actual time needed. A simple questionnaire can be devised for patients to fill out in order to see if there are any discrepancies in perceived time for length of visit. The form should include starting time when the patient saw the physician, actual time the physician left the exam room, and diagnosis.

Additionally, another problem area is a definition of what is an emergency. Several times during the study, lengthy waiting time was explained because an emergency had arisen and the doctor was delayed. Apparently, contingency time, or cushioning, for emergencies had not been scheduled. Emergencies should be categorized as to what type of delay may result in patient waiting time. Additional conclusions by the researcher are that out of the ordinary crises are common and should be treated that way and not as extraordinary occurrences.

Nothing can be taken for granted in scheduling patients and doctors. A contingency plan is recommended for delays. If nothing goes awry, the physician can use the extra time for dictation, an impromptu office staff meeting, catching up on medical journal readings,

or even relaxing. The researcher suggests scheduling two ten-minute intervals of "emergency" time for every three hours of appointment time.

In conclusion, waiting time is a complex problem and will not be solved by one or two simple procedures but rather a mixture of office procedures, scheduling patterns, better communication between physician and office staff as to length of time needed for office visits, and varying the office hours to include early morning office hours, late night hours and weekend hours. But, as shown through implementing the suggested procedures, it can be reduced.

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References

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M.D./Ph.D. Program

Recently, the University of Arizona College of Medicine initiated an M.D./Ph.D. Program. This program was undertaken in response to an increased interest on the part of students for research and possible academic medical careers. The program is very flexible in order to offer students maximum opportunity. Acceptance to the program is contingent on acceptance to the College of Medicine as a medical student. Once a student has been admitted to medical school, he/she may apply to the M.D./Ph.D. Program at any time and similarly, may withdraw from the program without penalty. At the present time, students may obtain a Ph.D. in any of the following areas: Biochemistry, Anatomy, Physiology, Pharmacology, Microbiology, and Molecular and Cell Biology.

However, the program is flexible enough so that a student with a particular interest and background could well develop a joint degree program in other areas.

The program design is straightforward. After admission to medical school, the student spends the first two years completing the basic sciences required of all medical students. The student is then expected to take and pass Part I of the National Board of Medical Examiners test and complete one clinical clerkship. During the third year, the student completes coursework for his/her Ph.D. as well as take a preliminary examination. During the fourth year, the student develops his/her research proposal and methodology for their research thesis. The fifth year is spent in completing the third year of medical school clinical clerkships. The

sixth year is a combined clinical and research year. Additional time may be taken to complete the research and thesis work. The degrees are conferred jointly. This will usually be at the end of the sixth or seventh year. In May 1985, the program will graduate its first joint degree holder, who will receive his medical degree and receive a Ph.D. in Microbiology. A second student is presently working on a joint degree in Biochemistry and is completing her first year of medical school. Thus far, three entering students to the class of 1989 have expressed serious interest in the M.D./Ph.D. Program.

Support for students during the M.D./Ph.D. Program will be through loans and scholarships during the period of time that they are medical students. During the time they are primarily